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| APPLICATION NO.     | FILING DATE | 3               | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.   | CONFIRMATION NO. |
|---------------------|-------------|-----------------|----------------------|-----------------------|------------------|
| 10/764,130          | 01/23/2004  |                 | Mohan R. Duggi       | 2003.08.010.WT0       | 6103             |
| 23990<br>DOCKET CLE |             | )5/14/2007<br>· |                      | EXAMINER              |                  |
| P.O. DRAWEI         | R 800889    |                 |                      | BRANDT, CHRISTOPHER M |                  |
| DALLAS, TX 75380    |             |                 | ,                    | ART UNIT              | PAPER NUMBER     |
|                     |             |                 |                      | 2617                  |                  |
|                     |             |                 | •                    |                       |                  |
|                     |             |                 |                      | MAIL DATE             | DELIVERY MODE    |
|                     |             |                 |                      | 05/14/2007            | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  | Application No. Applicant(s)  |   |  |  |  |  |  |
|--|---|---|--|--|--|--|--|
|  | 10/764,130  | DUGGI ET AL.  |  |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit  |  |  |  |  |  |
| Through A. All I.  | Christopher M. Brandt   | 2617  |  |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the o  | correspondence address  |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N.<br>nely filed<br>the mailing date of this communication.<br>D (35 U.S.C. § 133). |  |  |  |  |  |
| Status   |   |   |  |  |  |  |  |
| 1)⊠ Responsive to communication(s) filed on 27 M   | arch 2007.  |   |  |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This   | ·   |   |  |  |  |  |  |
| 3) Since this application is in condition for allowar  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |   |  |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |   |   |  |  |  |  |  |
| Disposition of Claims  |   |   |  |  |  |  |  |
| 4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.  |   |   |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |   |  |  |  |  |  |
| 5) Claim(s) is/are allowed.  |   |   |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1-20</u> is/are rejected.  | · <u> </u>  |   |  |  |  |  |  |
| 7) Claim(s) is/are objected to.  |   |   |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | election requirement.   |   |  |  |  |  |  |
| Application Papers   |   |   |  |  |  |  |  |
| 9) The specification is objected to by the Examine   | r.  |   |  |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>23 January 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.   |   |   |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |   |  |  |  |  |  |
| 11) ☐ The oath or declaration is objected to by the Ex   | aminer. Note the attached Office  | Action or form PTO-152.   |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |   |  |  |  |  |  |
| 12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:   | priority under 35 U.S.C. § 119(a  | )-(d) or (f).   |  |  |  |  |  |
| 1. ☐ Certified copies of the priority documents  | s have been received  |   |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |   |   |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |   |  |  |  |  |  |
| application from the International Bureau  | (PCT Rule 17.2(a)).   | -   |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |   |  |  |  |  |  |
|  |   |   |  |  |  |  |  |
|  |   |   |  |  |  |  |  |
| Attachment(s)  |   |   |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  | 4) Interview Summary<br>Paper No(s)/Mail Da   |   |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date   | 5) Notice of Informal P 6) Other:   |   |  |  |  |  |  |
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## **DETAILED ACTION**

## Response to Amendment

This action is in response to Applicant's amendment filed on March 27, 2007. Claims 1-20 are still pending in the application.

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-20 are rejected under 35 USC 103(a) as being unpatentable over Nelson (US Patent 6,292,838 B1) in view of Lipasti (US PGPUB 2002/0039357 A1).

Consider **claim 1**. Nelson discloses the invention for use in a communication network formed by a plurality of devices, a first device capable of routing data packets, said first device comprising:

a radio frequency (RF) transceiver capable of communicating with other ones of said plurality of devices (column 10 lines 4-28, read as the router transmits the received packet); and

a controller capable of receiving incoming data packets from said RF transceiver and sending outgoing data packets to said RF transceiver, wherein said controller is further capable of receiving a first data packet associated with at least one of: the incoming data packet and the outgoing data packet, determining a first medium access control (MAC) layer address associated with said first data packet, and adding said first MAC layer address to said first data packet (column 10 lines 4-28, read as when an incoming packet, destined for a network device on a specific subnet, arrives at a router, the router searches the ARP cache to find a MAC address. If the router finds a corresponding MAC address, then the packet can be converted to include the new MAC address).

Nelson discloses the claimed invention except he fails to teach a mobile ad hoc network (MANET) and that the communication is wireless.

However, Lipasti discloses a mobile ad hoc network (MANET) and that the communication is wireless (paragraph 22, read as the invention can be used in any kind of mobile ad hoc network such as a network according to the IEEE 802.11 WLAN (Wireless Local Area Network).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Lipasti into the invention of Nelson in order to implement this network in a Bluetooth network or a Wireless Local Area Network (paragraph 22).

Consider **claim 11**. Nelson discloses the invention for use in a communication network formed by a plurality of devices, a method of routing data packets in a first device comprising the steps of:

receiving a first data packet associated with at least one of: an incoming data packet and an outgoing data packet (column 10 lines 4-28, read as an incoming packet, destined for a network device on a specific subnet arrives at a router);

determining a first medium access control (MAC) layer address associated with the first data packet (column 10 lines 4-28, the router searches the ARP cache to find a MAC address when an incoming packet arrives); and

adding the first MAC layer address to the first data packet (column 10 lines 4-28, read as if the router finds a corresponding MAC address, then the packet can be converted to include the new MAC address).

Nelson discloses the claimed invention except he fails to teach a mobile ad hoc network (MANET).

However, Lipasti discloses a mobile ad hoc network (MANET) (paragraph 22, read as the invention can be used in any kind of mobile ad hoc network such as a network according to the IEEE 802.11 WLAN (Wireless Local Area Network).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Lipasti into the invention of Nelson in order to implement this network in a Bluetooth network or a Wireless Local Area Network (paragraph 22).

Consider claim 2 (and claim 12) and as applied to claim 1. Nelson and Lipasti disclose wherein said controller determines said first MAC layer address associated with said first data packet by determining a first destination MANET node associated with said first data packet (Nelson; column 10 lines 4-28).

Consider claim 3 (and claim 13) and as applied to claim 2. Nelson and Lipasti disclose wherein said controller further determines said first MAC layer address associated with said first data packet by determining a first route coupling said first MANET node and said first destination MANET node (column 9 line 35 – column 10 line 3, Lipasti; paragraph 8, 26, 27).

Consider claim 4 (and claim 14) and as applied to claim 3. Nelson and Lipasti disclose wherein said controller determines said first route by looking up said first route in a routing table associated with said first MANET node (Nelson; column 12 lines 14-32, Lipasti; paragraphs 84, 87, 99).

Consider claim 5 (and claim 15) and as applied to claim 4. Nelson and Lipasti disclose wherein said controller looks up said first route using an IP address associated with said first data packet (column 12 lines 14-32).

Consider claim 6 and 7 (and claims 16 ad 17) and as applied to claim 3. Nelson and Lipasti disclose wherein said controller forwards said first data packet containing said first MAC layer address to said first destination MANET node by transmitting said first data packet to a next sequential MANET node in said first route and wherein said first MAC layer address is associated with said next sequential MANET node in said first route (Nelson; column 3 lines 49-57, column 10 lines 4-28, Lipasti; paragraph 26).

Consider claim 8 (and claim 18) and as applied to claim 6. Nelson and Lipasti disclose wherein said controller is further capable of receiving a second data packet from a medium access control (MAC) layer associated with said first MANET node and determining if said second data packet contains a MAC layer address associated with said first MANET node (Nelson; column 10 lines 4-28, Lipasti; paragraph 27).

Consider claim 9 (and claim 19) and as applied to claim 8. Nelson and Lipasti disclose wherein said controller, in response to a determination that said second data packet does contain a MAC layer address associated with said first MANET node, routes said second data packet to a second destination MANET node (Nelson; column 10 lines 4-28, Lipasti; paragraph 27).

Consider claim 10 (and claim 20) and as applied to claim 9. Nelson and Lipasti disclose wherein said controller, in response to a determination that said second data packet does not contain a MAC layer address associated with said first MANET node, stores Internet

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protocol (IP) information associated with said second data packet in a routing table associated with said first MANET node (Nelson; column 12 lines 14-32, Lipasti; paragraphs 84, 87, 99).

## Conclusion

Any response to this Office Action should be faxed to (571) 273-8300 or mailed to:

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Brandt whose telephone number is (571) 270-1098. The examiner can normally be reached on 7:30a.m. to 5p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Christopher M. Brandt

C.M.B./cmb

April 27, 2007

NICK CORSARO NICK CORSARO NISORY PATENT EXAMINER